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REMARKS

Applicants respectfully request the reconsideration of the Examiner's final rejection of the first office action under MPEP §706.07(b). Applicants note that this section of the MPEP requires that a proper final first office action must be made on a new application that is "a continuing application of, or a substitute for, an earlier application, and (B) all claims of the new application (I) are drawn to the same invention claimed in the earlier application, and (2) would have been properly finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application." Applicants submit that for at least the reason that the claims contained in the amendment filed on April 29, 2006 were not directed to the 'same' invention than that claimed in the earlier application, the Office Action should not have been made final. More specifically, the claims contained in the April 29, 2006 amendment contained subject matter and claim limitations that were not presented in any earlier application. For example, the claim limitation "the control operation adjusting a parameter signal determined by calculation of an amount of error rate variation, the parameter signal adjustment being based upon a difference from an optimal value and error rate calculations periodically made above and below the optimum value" was never presented in any earlier application. Accordingly, Applicants respectfully submit that the finality of the office action must be withdrawn, and request further consideration of the amended claims attached hereto.

In response to the Examiner's final office action, Applicants have modified the independent claims to clarify the invention and distinguish the claimed invention from the

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prior art of record. More specifically, Applicants have modified the independent claims to further include the requirement that the control operation perform adjusting of a parameter signal determined by calculation of an amount of error rate variation, the parameter signal adjustment being based upon a difference from a current value, and error rate calculations periodically made above and below the current value, and wherein the final parameter value applied is selected from the two incremented values that result in a decreased error rate. This process continues until neither the incremented value nor the decremented value results in an improved error rate.

Applicants note that the support for these modifications can be found in Figures 5 and 6 and in the corresponding supporting portions of the specification. As shown in Figure 5 the ultimate goal is to adjust the bias of a parameter error signal incrementally along the parabolic curve to arrive at a final optimal value as shown in the Figure, wherein any further increment or decrement of the bias of the parameter error signal results in an increase in error rate. This method it is further documented in steps 103 - 108 of Figure 6. As shown in step 103, a new parameter is calculated by incrementing the current value and then calculating the resultant error rate in step 105. As shown in step 106, a new parameter as calculated by decrementing said current value and then calculating the resultant error rate in step 108. Once it is determined which parameter results in a decrease in the calculated error rate, a new parameter value is applied by the control means and the entire processes executed over again.

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The prior art cited by the Examiner provides no teaching or suggestion whatsoever regarding this advance in the art which enables a flexible approach to incrementally arriving at an optimum error rate for any given reproduction conditions.

Accordingly, in light of the foregoing, Applicants respectfully submit that all claims now stand in condition for allowance.

9/7/1

Respectfully submitted,

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